

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



9832  
2.2

# U. S. DEPARTMENT OF AGRICULTURE

Office of Information

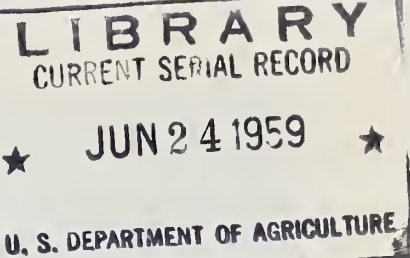


PHOTO SERIES NO. 38

## MARKETING FLORIDA CITRUS

MAY 1959

Citrus fruits form an important part of Florida's agricultural economy. They also are a popular item on today's grocery shelves. In recent years, Florida has produced an annual average of five million tons of citrus fruits of all kinds: oranges, grapefruit, tangerines, tangelos, limes. In the 1958 season, this citrus crop was valued at approximately \$290 million. These pictures, taken for USDA's Agricultural Marketing Service, show some of the steps in harvesting and preparing Florida citrus for market in fresh and processed forms.



N-26401--Citrus fruit intended for the fresh market must be carefully handled. Any damage could lead to spoiling during the trip to market. Here, field boxes are transferred from a trailer to the truck which will haul them to the packing plant.



N-26218--Oranges headed for processing begin the first leg of their journey in grove trucks. The oranges are hauled in bulk to convenient points in or near the grove for transfer to large truck-trailers which complete the journey to the processing plants.



N-26210--Hoisting machinery on a grove truck enables it to discharge its load of oranges into a large trailer in little time. As soon as an empty truck-trailer returns from the processing plant, the tractor unit will be unhooked and switched to the waiting loaded trailer.



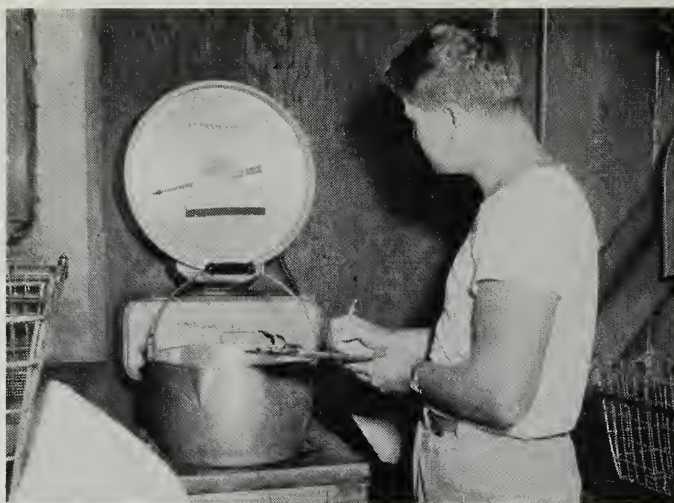
N-26410--After the loaded tractor-trailer unit is weighed in, the load of oranges is backed into the unloading ramp. The ramp is inclined so that when the trailer is backed in, the fruit will roll out. The average trailer can be unloaded in about 20 minutes.

*Magazines and newspapers may obtain glossy prints of any of these photographs from the Photography Division, Office of Information, U. S. Department of Agriculture, Washington 25, D. C. Others may purchase prints (8 x 10) at \$1.00 each from the same address.*

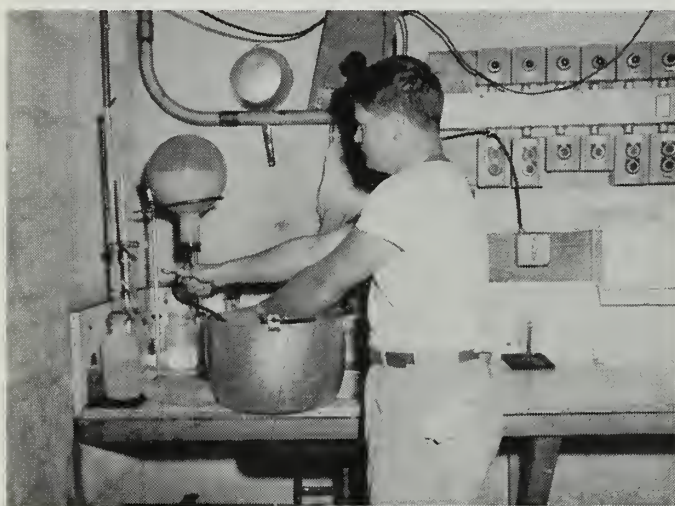




N-26416--As the fruit is unloaded, it is carried into the processing plant on a conveyor system. It will go into storage bins, and then be mixed with other lots on the basis of the results of internal quality tests.



N-26406--After unloading, samples of fresh fruit are drawn for inspection by an employee of the Federal-State Inspection Service, operated jointly by the United States Department of Agriculture and the State of Florida. Here, a licensed inspector weighs juice extracted from a sample of fruit. The amount of juice is compared with the weight of the fruit to determine the juice content of the fresh fruit.



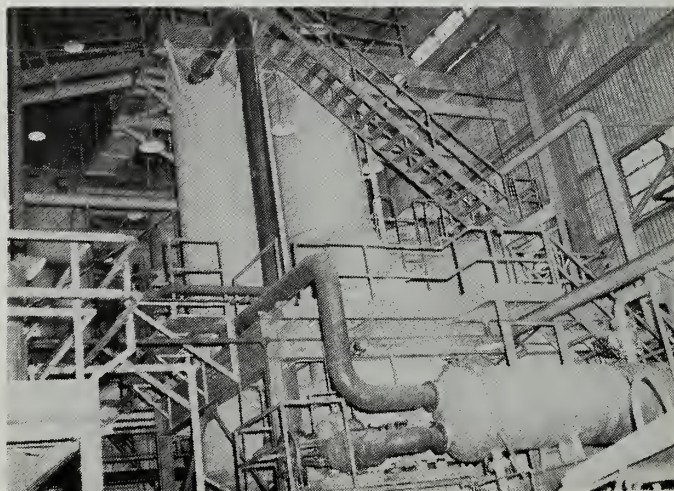
N-26407--Licensed inspector determines the fruit sugar and citric acid content of the fruit. These are important in determining the value of the load. Results of these tests are also used by the plant in blending the juice to the proper standards.



N-26226--Here, oranges go through a high-pressure soap spray before being sent to the extractors. Citrus fruit is washed and scrubbed several times to insure sanitation.

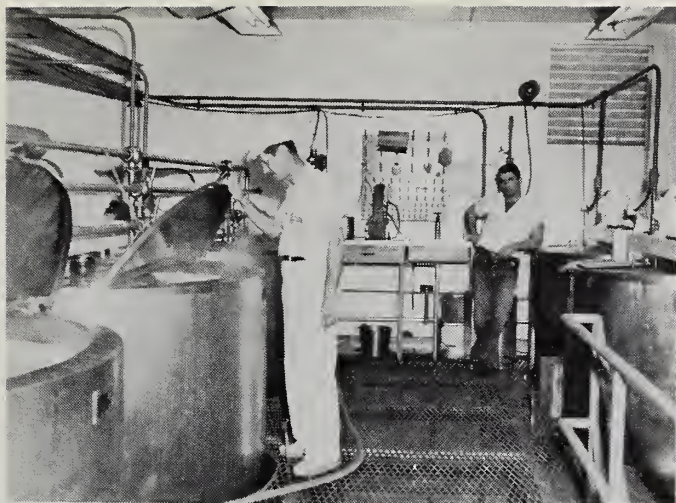


N-26228--Extractors such as these, ingeniously employ the principles of cutting, squeezing or rubbing to remove the juice from the citrus, and send it flowing through the processing steps toward the finished product. The peels are further processed and used for cattle feed and citrus molasses.

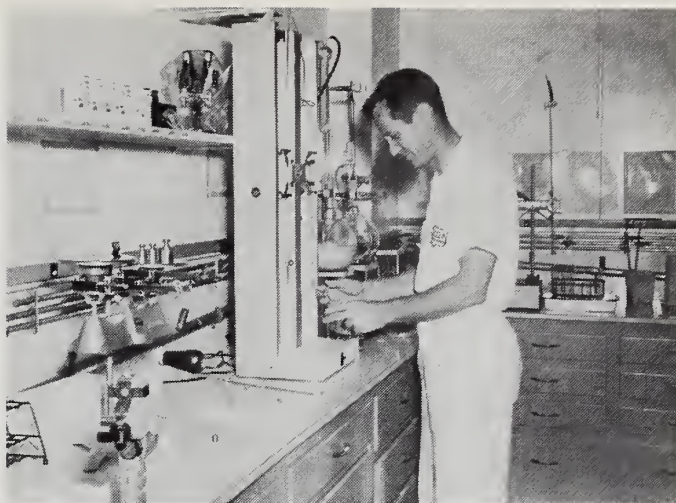


N-26229--Heart of a frozen citrus concentrate plant is its concentrator or evaporator which removes water from the juice. This is done by reducing the atmospheric pressure within the concentrator unit so that the water in the orange juice will vaporize at a low temperature. After leaving the evaporator, the concentrated juice is blended with fresh juice to restore proper flavor. It is then quickly chilled.

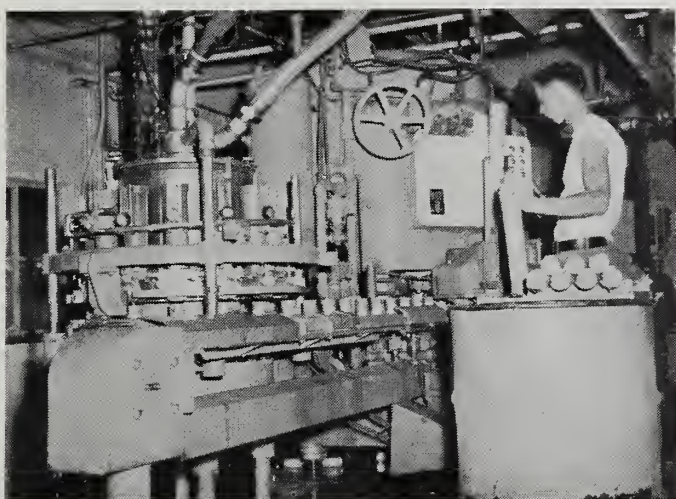




BN-3905--USDA processed products inspector in a plant operating under continuous inspection is checking sanitation of the cold wall blend tanks where concentrate is blended with fresh juice from the finisher.



BN-3906--The USDA inspector is running laboratory tests on the finished concentrate to make sure that it meets U. S. grade requirements. Under the continuous inspection service, an inspector is on duty in the plant at all times when fruit is being processed.



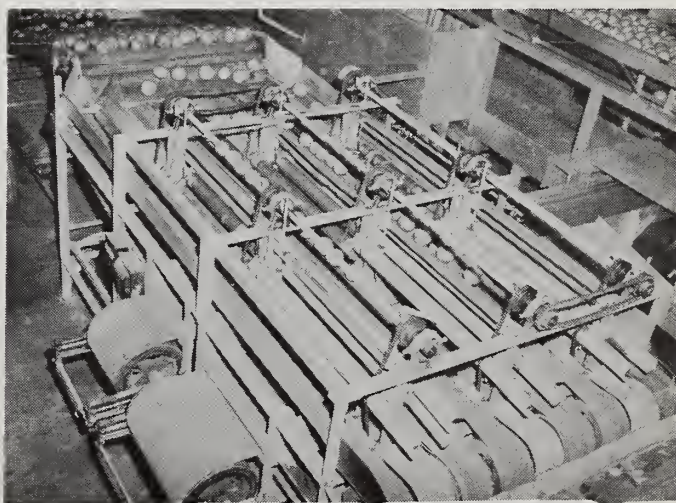
N-26230--Machines like these can accurately fill and seal cans of the concentrate at speeds as high as 400 per minute. After filling and sealing, the cans move directly into the freezer where they are quick-frozen at temperatures well below zero.



N-26234--The frozen cans are automatically packed into fiberboard cases. Then electric lift trucks, driven by warmly dressed plant employees, are used to move the packaged products into the storage room. The temperature in the storage room is maintained below zero by high-speed ammonia compressors.



N-26353--Grapefruit, to be packed for the fresh market, is unloaded at the packing house after being trucked from the grove.



N-26359--Grapefruit goes through presizing machinery which eliminates sizes which are not suitable for packing for the fresh market. Sizing of grapefruit, oranges and tangerines is based on diameter requirements set forth in the U. S. grade standards.





N-26363--After sizing, the fruit is washed and scrubbed, and then given a coating of wax to protect it during the journey to retail markets.



N-26366--As fruit moves along conveyor belt, women sorters remove off-colored and otherwise defective fruit.



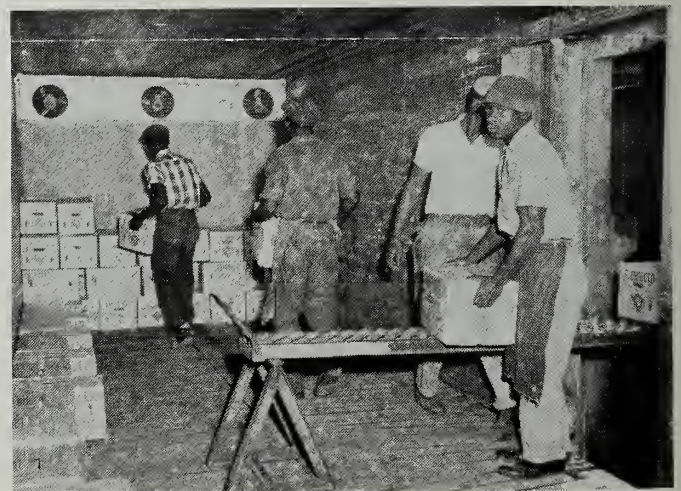
N-26376--Woman packer completes packing grapefruit in a wirebound crate. Fiberboard cartons are also widely used in packing citrus fruit for shipment to the fresh market.



N-26377--Federal-State inspector inspects carton of grapefruit after packing. All Florida citrus fruit shipped to out-of-State markets must meet grade regulations of the Federal marketing order for Florida citrus fruit. These regulations are based on the U. S. grade standards for the respective commodity.



N-26379--Federal-State inspector makes internal examination of grapefruit to check for possible damage by dryness or freezing injury.



N-26391--These cartons of fruit have been precooled at the packing plant and are being loaded into a refrigerator car for shipment to market. A large proportion of Florida citrus fruit also moves by refrigerated trucks.